

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/961,078		09/21/2001	Joel E. Cordsmeyer	BELL-0116/01114	5101	
38952	7590	04/29/2005		EXAMINER		
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE - 46TH FLOOR				GREY, CHRI	GREY, CHRISTOPHER P	
PHILADEL				ART UNIT PAPER NUMBER		
				2667		

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			/
	Application No.	Applicant(s)	G/
	09/961,078	CORDSMEYER	ET AL.
Office Action Summary	Examiner	Art Unit	
	Christopher P Grey	2667	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence a	ddress
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tipoly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE.	mely filed ys will be considered time in the mailing date of this of	ely. communication.
Status			
1) Responsive to communication(s) filed on 21.5	September 2001.		
2a) This action is <b>FINAL</b> . 2b) ⊠ Thi	s action is non-final.		
3) Since this application is in condition for allows closed in accordance with the practice under			e merits is
Disposition of Claims			
4) ☐ Claim(s) 1-27 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/a	awn from consideration.		
Application Papers			
9)⊠ The specification is objected to by the Examin	er.		
10)☐ The drawing(s) filed on is/are: a)☐ acc	cepted or b) objected to by the	Examiner.	
Applicant may not request that any objection to the		` '	
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E			
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat* See the attached detailed Office action for a list	ts have been received.  Its have been received in Applicate  Ority documents have been received in Applicate  Ority documents have been received.	ion No ed in this National	Stage
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summary		
<ul> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ul>	Paper No(s)/Mail D ) 5) Notice of Informal F 6) Other:		O-152)

Application/Control Number: 09/961,078

Art Unit: 2667

# **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the fabric structure" in line 9. There is insufficient antecedent basis for this limitation in the claim.

### Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 7 discloses "cilli code", which is not described within the specification of the disclosure.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker et al. (US 6363421) in view of Chisholm (US 6697970).
- <u>Claim 1</u> Barker et al. ('Barker' hereinafter) discloses a method for remote management of telecommunications network elements.

Barker discloses a management computer connected to an element management server. (Col 1 lines 25-35). Barker also discloses an application processor (intermediary) for interfacing the element management server and the network element (Col 1 lines 55-65).

Barker discloses a remote management computer issuing multiple commands to the element management server, and furthermore, the element management server responding to these commands (Col 1 line 66- Col 2 line 17). Barker discloses detailed status information being maintained for the network element (Col 4 lines 27-36 and Col 5 lines 17-20).

Barker does not specifically disclose gathering status information for the fabric structure and the network element being a multiplexing element. However, Chisholm discloses maintaining an inventory table for a network element, and the system

Art Unit: 2667

manager having summarized information concerning the identity and status of the network element and the element management server (Col 5 lines 56-66), where it would have been obvious to one of the ordinary skill in the art at the time of the invention that the combination of the element management server and network element compose the fabric structure, and that any network element may be considered a multiplexing element (Col 4 lines 45-54).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the maintenance of status information of the network element, with the maintenance of the element management server by a system manager as disclosed by Chisholm. The motivation for this modification is to maintain an inventory of status information (Col 5 lines 55-67).

Claim 2, 18 Barker discloses a TCP/IP connection between an element management system client and an element management system server, and also a TCP/IP connection between an application processor and an element management system server (Fig 3 element 32 and 28, and elements 32 and 80).

Claim 3, 19 Barker discloses the TCP/IP session as disclosed in the rejection of claim 2 and 18. Barker also discloses the use of terminal emulation (Col 26 lines 60-Col 27 line 4).

Claim 4, 20 Barker discloses the use of terminal emulation as disclosed in the rejection of claim 3. Barker discloses establishing a telnet session (Col 26 lines 60-Col 27 line 4).

Art Unit: 2667

Claim 5, 21 Barker discloses a TCP/IP connection as disclosed in the rejection of claim 2 and 18. Barker discloses remotely managing a network element through a special communication link (Col 1 lines 25-36). It would have been obvious to one of the ordinary skill in the art that links connect ports, where a special link would require a special port, where a special port may be specified as being an unassigned port.

<u>Claim 6</u> Barker discloses each client application registering with the element manager, where registering comprises providing identification and a port (address) of the client host (Col 30 lines 45-63).

Claim 7 The combined inventions of Barker and Chisholm disclose gathering a network address in the form of an identifier as disclosed in the rejection of claim 6, where it would have been obvious to one of the ordinary skill in the art at the time of the invention to equivocate any identifier as a cilli code.

Claim 8, 23 The rejection of claim 1 discloses issuing a first and second interface retrieve commands. Furthermore, Barker discloses TCP/IP protocols (Col 4 lines 6-17), where it would have been obvious to one of the ordinary skill in the art at the time of the invention that transport protocols are often applied as protocol independent.

<u>Claim 9, 24</u> The rejection of claims 8 and 24 disclose issuing the protocol independent interface retrieve commands. Furthermore, Barker discloses transport protocols (Col 4 lines 6-17), which are applied on a transport level.

Claim 10, 11, 25, 26 Barker discloses the gathering of status information of each network element as disclosed in the rejection of claim 1. However, Barker does not

specifically disclose determining a number of logical cross-connects in the multiplexing element.

Chisholm discloses an example of a network element being a wideband digital cross-connect (Col 4 lines 45-54), where it would have been obvious to one of the ordinary skill in the art at the time of the invention to manage the number of cross-connects (claim 10) and type (claim 11) within the management system (Col 4 lines 55-63) which manages the network elements (cross-connects).

<u>Claim 12</u> Barker discloses a network element status table for storing status information (Fig 3 element 96).

<u>Claim 13</u> Barker discloses a detailed status application that displays (report) static configuration data (Col 5 lines 17-20).

Claim 14 Barker discloses detailed status information being maintained for the network element (Col 4 lines 27-36 and Col 5 lines 17-20) and furthermore the rejection of claim 1 discloses gathering status information for the switch fabric. However, Barker does not disclose repeating gathering status information for the switch fabric for each remaining multiplexing element.

Chisholm discloses a plurality of network elements (Fig 1 element 14 A-C) being managed by an element management server (element 18 in Fig 1). Chisholm also discloses a system manager managing status information of all of the network elements (Col 5 lines 56-67). It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the management of a network from a remote location as disclosed by Barker, with the management of a number of network elements

as disclosed by Chisholm, where gathering status information would have to be repeated for each network element in order to maintain the status information of all of

Page 7

the elements. The motivation for this modification is to be able to remotely

manage/maintain network elements.

Claim 15 Barker discloses a management computer connected to an element management server (Col 1 lines 25-35). The management computer retrieves status information obtained from the element management server (Col 5 lines 17-20). Barker does not specifically disclose repeating gathering status information for each remaining element manager.

Chisholm discloses a plurality of network elements (Fig 1 element 14 A-C) being managed by an element management server (element 18 in Fig 1). Chisholm also discloses a system manager managing status information of all of the network elements (Col 5 lines 56-67). It would have been obvious to one of the ordinary skill in the art at the time of the invention that each network element could be assigned their own manager, and furthermore it would have been obvious to modify the remote management computer as disclosed by Barker to manage the element management servers as discussed above. The motivation for this modification is to be able to remotely manage/maintain network elements.

Claim 16 Barker discloses a management computer connected to an element management server. (Col 1 lines 25-35). Barker also discloses an application processor (intermediary) for interfacing the element management server and the network element (Col 1 lines 55-65).

Art Unit: 2667

Barker discloses the network element being connected to a management agent application for performing maintenance. Barker also discloses command requests being issued and command acknowledgements (Col 1 lines 55-65).

Barker discloses a remote management computer issuing multiple commands to the element management server, and furthermore, the element management server responding to these commands (Col 1 line 66- Col 2 line 17). Barker discloses detailed status information being maintained for the network element (Col 4 lines 27-36 and Col 5 lines 17-20).

Barker does not specifically disclose the network element being a multiplexing element. However, Chisholm discloses a management system wherein any network element may be considered a multiplexing element (Col 4 lines 45-54).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to specify the network element as disclosed by Barker with a multiplexing element as disclosed by Chisholm. The motivation for this specification is to provide switching functions and transport network functions (Col 4 lines 45-54).

<u>Claim 17</u> Barker discloses a remote management computer running a management application (software) as disclosed in Col 2 lines 18-33.

Claim 27 Barker discloses a remote management computer issuing multiple commands to the element management server (Col 1 line 66- Col 2 line 17). Barker also discloses an application processor (intermediary) for interfacing the element management server and the network element (Col 1 lines 55-65).

Application/Control Number: 09/961,078

Art Unit: 2667

Furthermore, Barker discloses the element management server responding to the commands (Col 1 line 66- Col 2 line 17). Barker discloses detailed status information being maintained for the network element (Col 4 lines 27-36 and Col 5 lines 17-20).

Page 9

Barker does not specifically disclose gathering status information for the fabric structure and the network element being a multiplexing element. However, Chisholm discloses maintaining an inventory table for a network element, and the system manager having summarized information concerning the identity and status of the network element and the element management server (Col 5 lines 56-66), where it would have been obvious to one of the ordinary skill in the art at the time of the invention that the combination of the element management server and network element compose the fabric structure, and that any network element may be considered a multiplexing element (Col 4 lines 45-54).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the maintenance of status information of the network element, with the maintenance of the element management server by a system manager as disclosed by Chisholm. The motivation for this modification is to maintain an inventory of status information (Col 5 lines 55-67).

Application/Control Number: 09/961,078 Page 10

Art Unit: 2667

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

(a) Alspaugh et al (US 2004/0213189) discloses a communication system within a

broadband system where a number of nodes are connected to form a mesh network.

Alspaugh also discloses an element manager and a number of DSLAM's.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Christopher P Grey whose telephone number is

(571)272-3160. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey

Examiner

Art Unit 2667

APSARQURESHT DIMMOV EVANMED